SPP-SS961

SERVICE MANUAL

US Model
Canadian Model

- SPP-SS961 is almost the same as SPP-SS960.
  This service manual contains printed wiring boards, schematic diagrams, exploded views and electrical parts list of this model.
  Please refer to SPP-SS960 service manual (9-925-739-□□) previously issued for other information.

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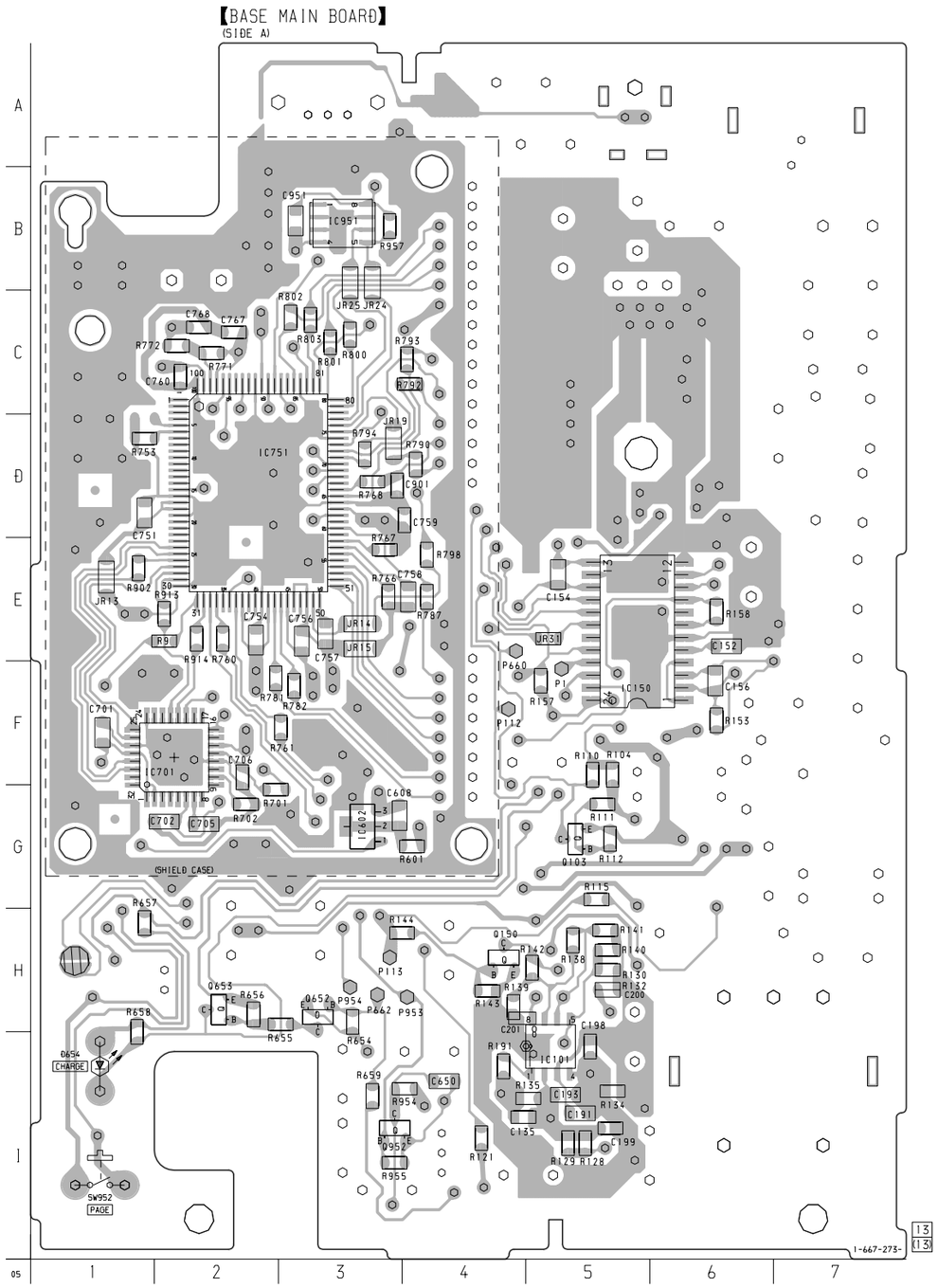
CORDLESS TELEPHONE

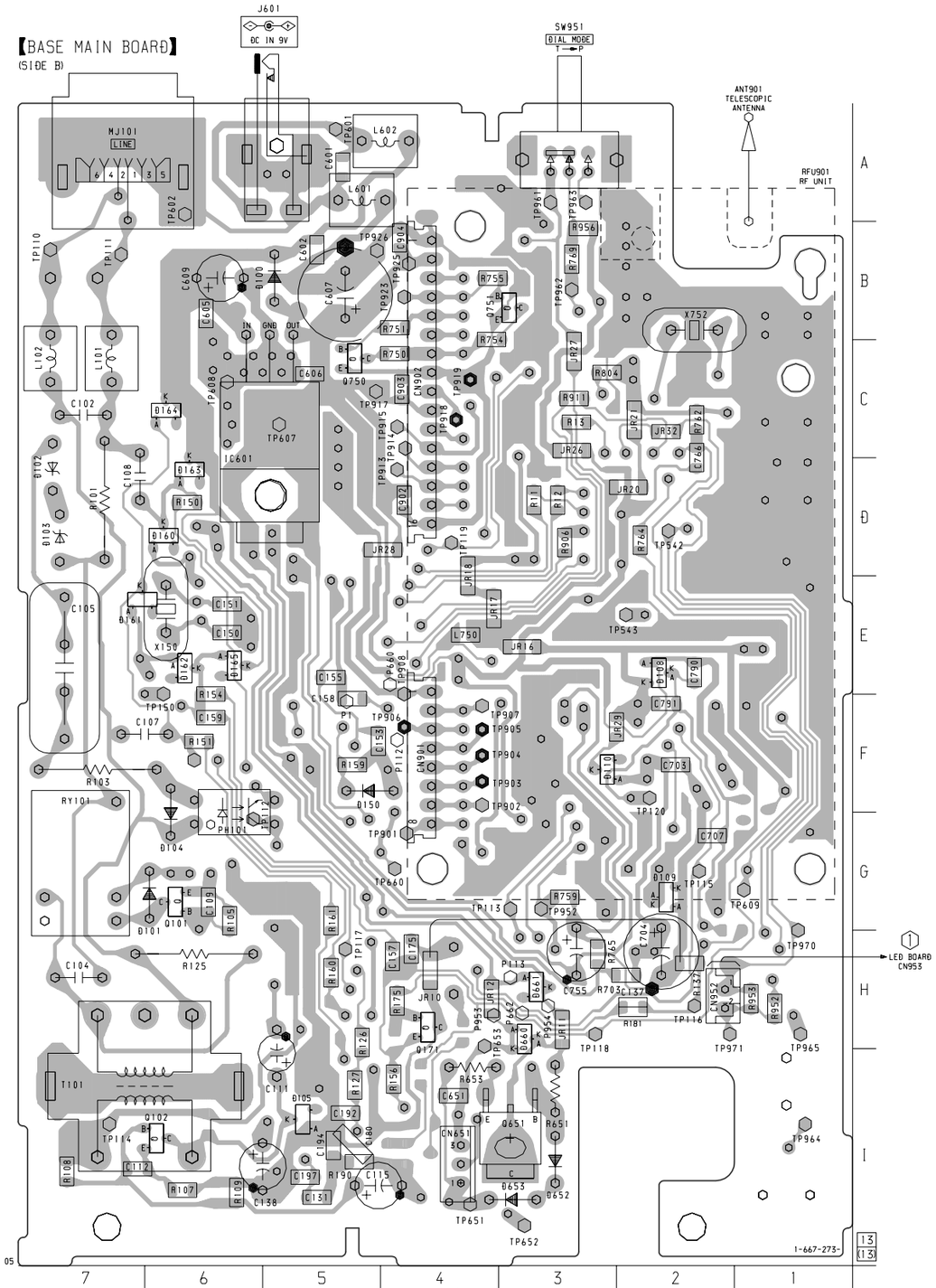
SONY®

MICROFILM

1. DIAGRAMS

1-1. PRINTED WIRING BOARDS – BASE UNIT Section –





Note:

- ——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

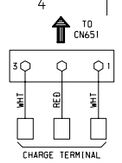
Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

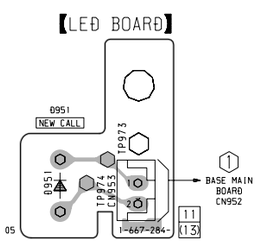
- **Semiconductor Location – BASE MAIN Board – (Side A)**

Ref. No.	Location	Ref. No.	Location
D654	I-1	IC951	B-3
IC101	I-5	Q103	G-5
IC150	E-5	Q150	H-4
IC602	G-3	Q652	H-3
IC701	F-2	Q653	H-2
IC751	D-2	Q952	I-3

- **Semiconductor Location – BASE MAIN Board – (Side B)**

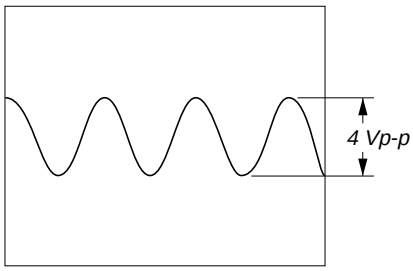
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D100	B-5	D160	D-6	IC601	C-5
D101	G-6	D161	E-7		
D102	D-7	D162	E-6	Q101	G-6
D103	D-7	D163	D-6	Q102	I-6
D104	G-6	D164	C-6	Q171	H-4
D105	I-5	D165	E-6	Q651	I-3
D108	E-2	D652	I-3	Q750	C-5
D109	G-2	D653	I-3	Q751	B-3
D110	F-3	D660	H-3		
D150	F-5	D661	H-3		





• **Waveform**

❶ IC751 ㊼ (XTALI)



9.6 MHz

Note:

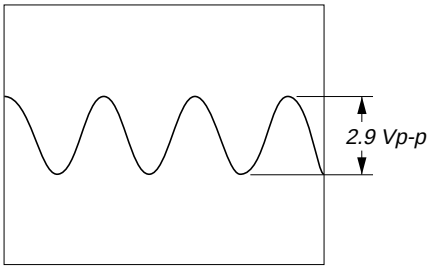
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- B+ : B+ Line.
- Power voltage is dc 9 V and fed with regulated dc power supply from external power voltage jack (J601).
- Power voltage is dc 12 V and fed with regulated dc power supply from modular jack (MJ101).
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : Talk
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : RX
  : TX
  : bell

• **Waveform**

❶ IC501 ㊼ (XTALI)

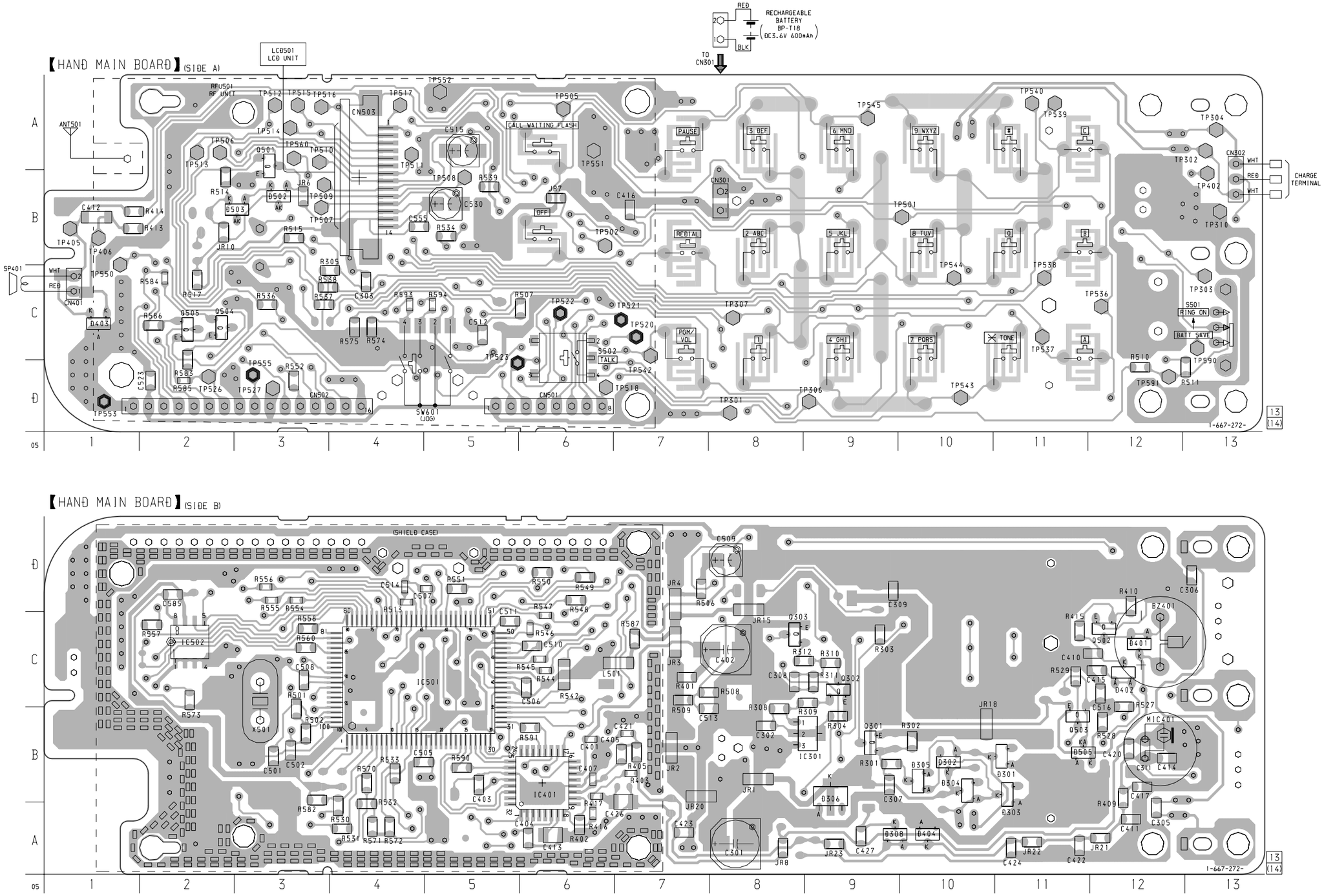


9.6 MHz

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.
- **B +** : B+ Line.
- Power voltage is dc 3.6 V and fed with regulated dc power supply from external power voltage jack (CN301).
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : Talk
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ▷ : RX
  ▶ : TX
  ▻ : bell

1-4. PRINTED WIRING BOARD – HANDSET Section –



- **Semiconductor Location – HAND MAIN Board – (Side A)**

Ref. No.	Location
D403	C-1
D502	B-3
D503	B-3
Q501	A-3
Q504	C-2
Q505	C-2

- **Semiconductor Location – HAND MAIN Board – (Side B)**

Ref. No.	Location
D301	B-11
D302	B-10
D303	A-11
D304	A-10
D305	A-10
D306	A-9
D308	A-9
D401	C-12
D402	C-12
D404	A-10
D505	B-11
IC301	B-9
IC401	A-6
IC501	C-4
IC502	C-2
Q301	B-9
Q302	B-9
Q303	C-8
Q502	C-12
Q503	B-11

Note:

- ○—— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.
- ▒▒▒ : Pattern on the side which is seen. (Carbon pattern).

(The other layers' patterns are not indicated.)

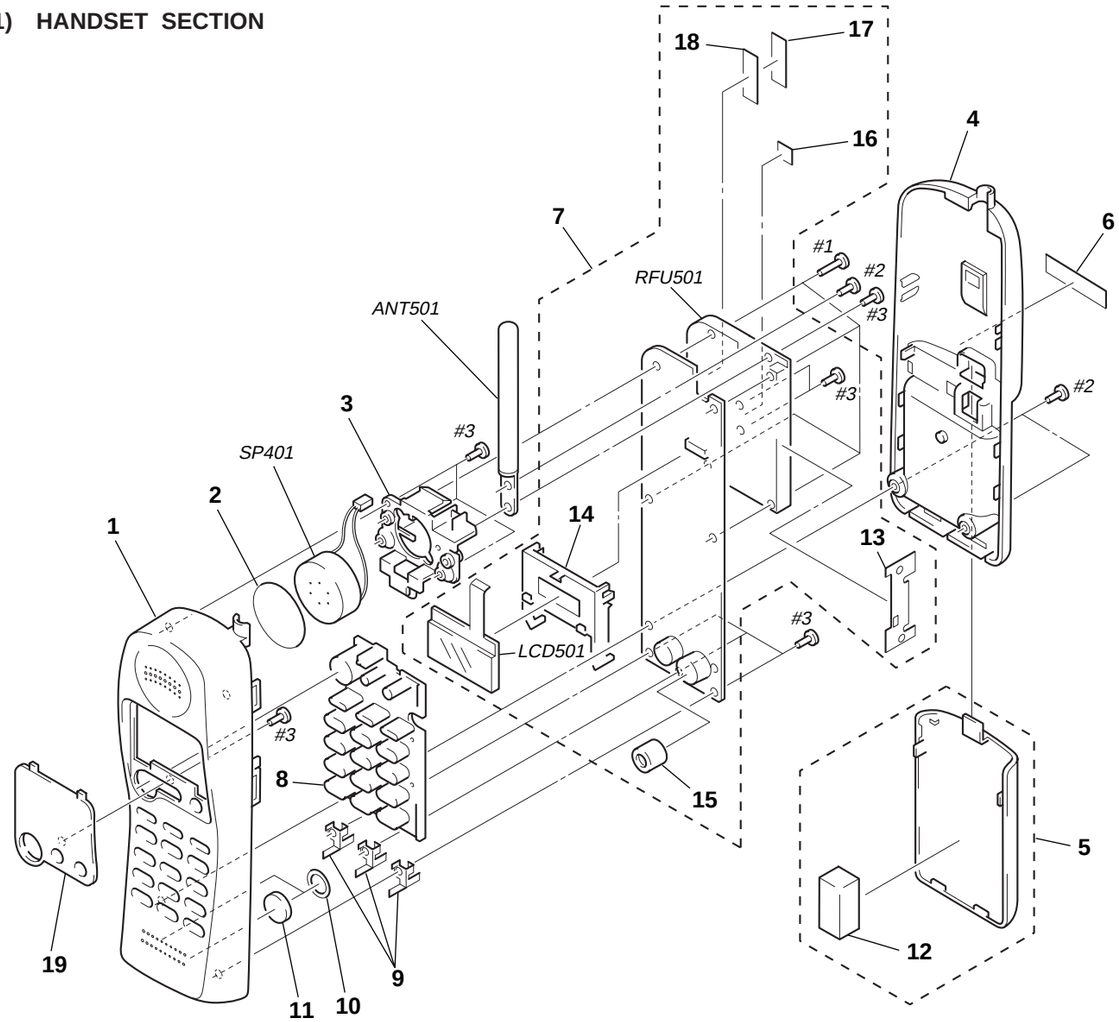
Caution:
Pattern face side: (Side B) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

2. EXPLODED VIEWS

NOTE:

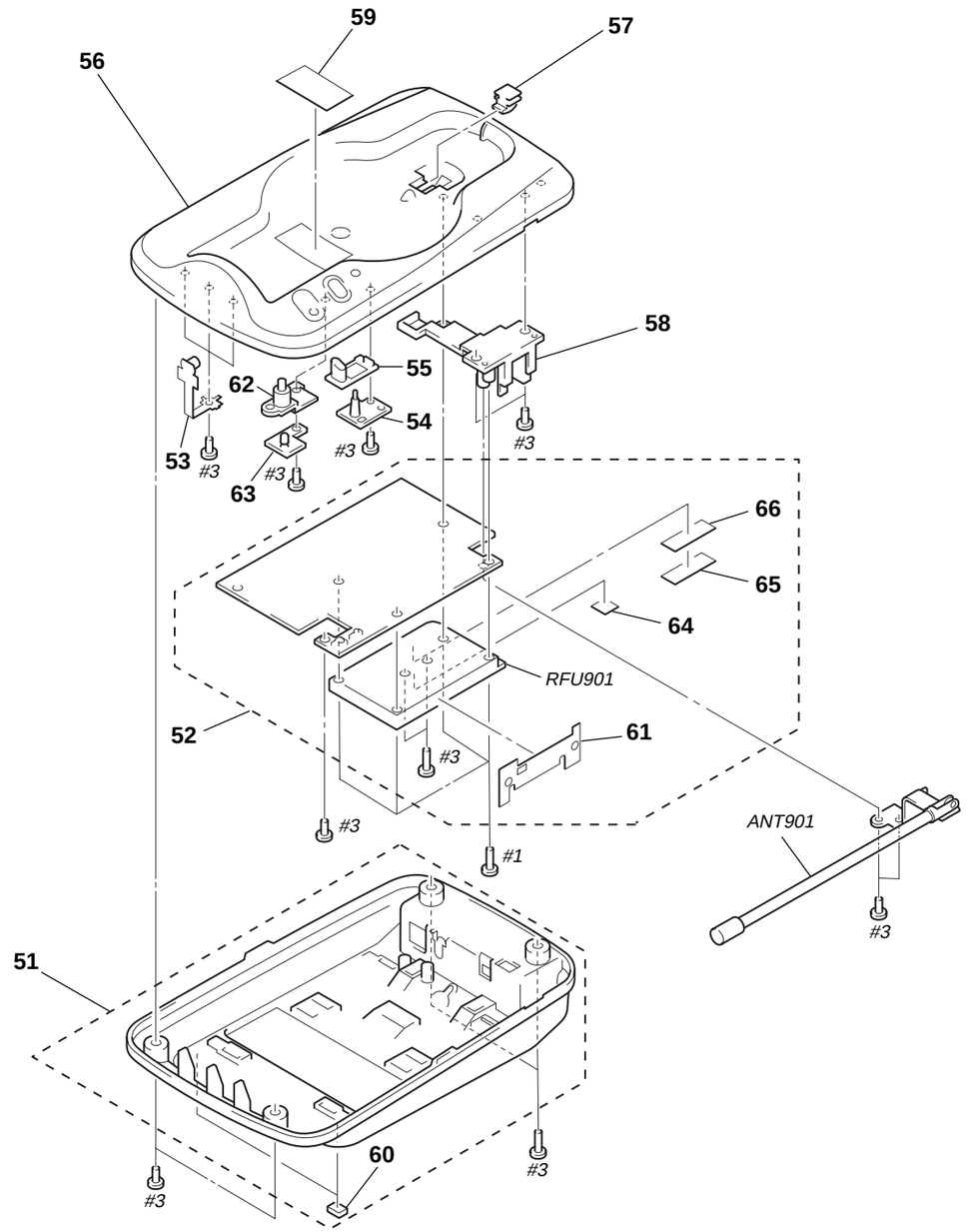
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

(1) HANDSET SECTION



Ref. No.	Part No.	Description	Remark
1	3-012-362-11	CABINET (FRONT)	
2	3-372-738-01	GASKET (RECIVER) (TWN)	
3	3-012-365-01	HOLDER (SP)	
4	3-012-363-11	CABINET (REAR)	
5	X-3375-670-1	LID ASSY, BATTERY CASE	
6	3-022-150-01	LABEL, NI-CD RECYCLE	
* 7	A-3622-113-A	HAND MAIN BOARD, COMPLETE	
8	1-771-066-21	SWITCH, RUBBER KEY	
9	3-012-366-01	TERMINAL (HAND), CHARGE	
* 10	3-935-519-11	CUSHION (BUZZER)	
11	3-939-071-11	SPONGE (MIC)	
12	3-935-520-01	CUSHION (BATTERY)	
13	3-028-552-01	SHEET (COPPER LEAF. RF)	
14	3-012-368-01	HOLDER (LCD)	
15	3-935-518-01	CUSHION (MICROPHONE)	
16	3-026-884-01	SHEET (RF UNIT)	
17	3-018-635-01	SHEET (RF)	
18	3-020-380-01	SHEET, INSULATOR (RF)	
19	3-012-367-11	PANEL	
ANT501	1-501-933-21	ANTENNA	
LCD501	1-475-241-11	LCD UNIT	
RFU501	1-475-242-21	RF UNIT	
SP401	1-504-829-11	SPEAKER (28MM)	

(2) BASESET SECTION



Ref. No.	Part No.	Description	Remark
51	X-3375-671-1	CABINET (LOWER) ASSY	
* 52	A-3622-174-A	BASE MAIN BOARD, COMPLETE	
53	3-012-378-01	TERMINAL (BASE), CHARGE	
54	3-012-376-01	LENS (CHARGE)	
55	3-012-373-11	BUTTON (PAGE)	
56	3-012-371-31	CABINET (UPPER)	
57	3-012-374-21	HOLDER (HAND SET)	
58	3-012-375-01	HOLDER (ANT)	
59	3-007-173-01	LABEL (TERMINAL CAUTION) (/S)	
60	3-936-696-21	FOOT, RUBBER	
61	3-028-552-01	SHEET (COPPER LEAF. RF)	
62	3-012-377-01	LENS (C-ID)	
* 63	1-667-284-11	LED BOARD	
64	3-026-884-01	SHEET (RF UNIT)	
65	3-018-635-01	SHEET (RF UNIT)	
66	3-020-380-01	SHEET, INSULATOR (RF)	
ANT901	1-501-932-21	ANTENNA	
RFU901	1-475-242-11	RF UNIT	

3. ELECTRICAL PARTS LIST

BASE MAIN

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
*	A-3622-174-A	BASE MAIN BOARD, COMPLETE			
		**********			
	3-028-552-01	SHEET (COPPER LEAF.RF)			
	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S			
		< CAPACITOR >			
⚠C102	1-162-117-00	CERAMIC	100PF	10%	500V
⚠C104	1-162-117-00	CERAMIC	100PF	10%	500V
⚠C105	1-136-193-11	FILM	0.47uF	10%	250V
C107	1-107-423-11	CERAMIC	220PF	10%	1KV
C108	1-107-423-11	CERAMIC	220PF	10%	1KV
C109	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C111	1-126-964-11	ELECT	10uF	20%	50V
C112	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C115	1-126-514-11	ELECT	22uF	20%	50V
C131	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C135	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C137	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C138	1-126-963-11	ELECT	4.7uF	20%	50V
C150	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C151	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C152	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C153	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C154	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C155	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C156	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C157	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C158	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C159	1-163-021-00	CERAMIC CHIP	0.01uF	10%	50V
C175	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C180	1-163-077-00	CERAMIC CHIP	0.1uF		50V
C191	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C192	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C193	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C194	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C197	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C198	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C199	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C200	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C201	1-163-009-11	CERAMIC CHIP	1000PF	5%	50V
C601	1-163-033-00	CERAMIC CHIP	0.022uF		50V
C602	1-163-033-00	CERAMIC CHIP	0.022uF		50V
C605	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C606	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C607	1-126-916-11	ELECT	1000uF	20%	6.3V
C608	1-164-505-11	CERAMIC CHIP	2.2uF		16V
C609	1-126-963-11	ELECT	4.7uF	20%	50V
C650	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C651	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C701	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C702	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C703	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C704	1-126-925-11	ELECT	470uF	20%	10V
C705	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C706	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C707	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C751	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C754	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C755	1-126-964-11	ELECT	10uF	20%	50V
C756	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C757	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C758	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C759	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C760	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C766	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C767	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C768	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C790	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C791	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C901	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C902	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C903	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C904	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C951	1-163-031-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
* CN651	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN901	1-779-773-11	PIN, CONNECTOR (PC BOARD) 8P			
* CN902	1-779-774-11	PIN, CONNECTOR (PC BOARD) 16P			
		< DIODE >			
D100	8-719-991-33	DIODE 1SS133T-77			
D101	8-719-991-33	DIODE 1SS133T-77			
⚠D102	8-719-109-89	DIODE RD5.6ESB2			
⚠D103	8-719-109-89	DIODE RD5.6ESB2			
⚠D104	8-719-991-33	DIODE 1SS133T-77			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

BASE MAIN

Ref. No.	Part No.	Description	Remark
D105	8-719-157-36	DIODE RD6.8M-B	
D108	8-719-914-42	DIODE DA204K	
D109	8-719-914-42	DIODE DA204K	
D110	8-719-914-42	DIODE DA204K	
D150	8-719-991-33	DIODE 1SS133T-77	
D160	8-719-157-36	DIODE RD6.8M-B	
D161	8-719-157-36	DIODE RD6.8M-B	
D162	8-719-157-36	DIODE RD6.8M-B	
D163	8-719-022-14	DIODE UZM-13B	
D164	8-719-022-14	DIODE UZM-13B	
D165	8-719-022-14	DIODE UZM-13B	
D652	8-719-991-33	DIODE 1SS133T-77	
D653	8-719-991-33	DIODE 1SS133T-77	
D654	8-719-050-05	DIODE SLR-325VRT31 (CHARGE)	
D660	8-719-022-14	DIODE UZM-13B	
D661	8-719-914-42	DIODE DA204K	
		< IC >	
IC101	8-759-909-71	IC BA4558F	
IC150	8-759-398-67	IC MT8843ASR	
IC601	8-759-482-72	IC uPC29M05HF	
IC602	8-759-519-46	IC S-80730AN-DT-S	
IC701	8-759-530-12	IC 10497-15	
IC751	8-759-530-13	IC M7002-11	
IC951	8-759-487-03	IC S-24C01AFJA-TB-01	
		< JACK >	
J601	1-778-380-11	JACK, DC (POLARITY UNIFIED TYPE)	(DC IN 9V)
		< SHORT >	
JR10	1-216-296-00	SHORT 0	
JR11	1-216-296-00	SHORT 0	
JR12	1-216-296-00	SHORT 0	
JR13	1-216-296-00	SHORT 0	
JR14	1-216-296-00	SHORT 0	
JR15	1-216-296-00	SHORT 0	
JR16	1-216-296-00	SHORT 0	
JR17	1-216-296-00	SHORT 0	
JR18	1-216-296-00	SHORT 0	
JR19	1-216-296-00	SHORT 0	
JR20	1-216-296-00	SHORT 0	
JR21	1-216-296-00	SHORT 0	
JR24	1-216-296-00	SHORT 0	
JR25	1-216-296-00	SHORT 0	
JR26	1-216-296-00	SHORT 0	
JR27	1-216-296-00	SHORT 0	
JR28	1-216-296-00	SHORT 0	
JR29	1-216-295-00	SHORT 0	
JR31	1-216-295-00	SHORT 0	
JR32	1-216-295-00	SHORT 0	
		< COIL >	
L101	1-410-470-11	INDUCTOR 10uH	
L102	1-410-470-11	INDUCTOR 10uH	
L601	1-410-468-11	INDUCTOR 6.8uH	
L602	1-410-468-11	INDUCTOR 6.8uH	
L750	1-412-945-11	INDUCTOR 3.3uH	

Ref. No.	Part No.	Description	Remark
		< JACK >	
⚠MJ101	1-766-250-11	JACK, MODULAR (2C) 6P (LINE)	
		< PHOTO INTERRUPTER >	
⚠PH101	8-719-156-73	PHOTO COUPLER PS2501-1LA	
		< TRANSISTOR >	
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q102	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q103	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q150	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q171	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q651	8-729-922-34	TRANSISTOR 2SD1758F5-QR	
Q652	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q653	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q750	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q751	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q952	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		< RESISTOR >	
R9	1-216-041-00	METAL CHIP 470 5% 1/10W	
R11	1-216-041-00	METAL CHIP 470 5% 1/10W	
R12	1-216-041-00	METAL CHIP 470 5% 1/10W	
R13	1-216-295-00	SHORT 0	
⚠R101	1-215-864-00	METAL OXIDE 150 5% 1W	F
⚠R103	1-215-877-11	METAL OXIDE 22K 5% 1W	F
R104	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R105	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R107	1-216-021-00	METAL CHIP 68 5% 1/10W	
R108	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R109	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R110	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R111	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R112	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R115	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R121	1-216-041-00	METAL GLAZE 470 5% 1/10W	
⚠R125	1-215-869-11	METAL OXIDE 1K 5% 1W	F
R126	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R127	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R128	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R129	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R130	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R132	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R134	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R135	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R137	1-216-085-00	METAL CHIP 33K 5% 1/10W	
R138	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R139	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R140	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R141	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R142	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R143	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R144	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R150	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R151	1-216-121-00	METAL GLAZE 1M 5% 1/10W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
R153	1-216-081-00	METAL CHIP	22K	5%	1/10W
R154	1-216-089-00	METAL CHIP	47K	5%	1/10W
R156	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R157	1-216-073-00	METAL CHIP	10K	5%	1/10W
R158	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R159	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R160	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R161	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R175	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R181	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R190	1-216-025-00	METAL GLAZE	100	5%	1/10W
R191	1-216-025-00	METAL GLAZE	100	5%	1/10W
R601	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R651	1-249-411-11	CARBON	330	5%	1/4W
R653	1-249-391-11	CARBON	6.8	5%	1/4W
R654	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R655	1-216-097-00	METAL CHIP	100K	5%	1/10W
R656	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R657	1-216-041-00	METAL CHIP	470	5%	1/10W
R658	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R659	1-216-101-00	METAL CHIP	150K	5%	1/10W
R701	1-414-481-11	INDUCTOR	68nH		
R702	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R703	1-216-009-00	METAL CHIP	22	5%	1/10W
R750	1-216-033-00	METAL CHIP	220	5%	1/10W
R751	1-216-073-00	METAL CHIP	10K	5%	1/10W
R753	1-216-073-00	METAL CHIP	10K	5%	1/10W
R754	1-216-045-00	METAL CHIP	680	5%	1/10W
R755	1-216-073-00	METAL CHIP	10K	5%	1/10W
R759	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R760	1-216-073-00	METAL CHIP	10K	5%	1/10W
R761	1-216-041-00	METAL CHIP	470	5%	1/10W
R762	1-216-073-00	METAL CHIP	10K	5%	1/10W
R764	1-216-041-00	METAL CHIP	470	5%	1/10W
R765	1-216-001-00	METAL CHIP	10	5%	1/10W
R766	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R767	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R768	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R769	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
R771	1-216-121-00	METAL GLAZE	1M	5%	1/10W
R772	1-216-025-00	METAL GLAZE	100	5%	1/10W
R781	1-216-041-00	METAL CHIP	470	5%	1/10W
R782	1-216-041-00	METAL CHIP	470	5%	1/10W
R787	1-216-041-00	METAL CHIP	470	5%	1/10W
R790	1-216-041-00	METAL CHIP	470	5%	1/10W
R792	1-216-041-00	METAL CHIP	470	5%	1/10W
R793	1-216-041-00	METAL CHIP	470	5%	1/10W
R794	1-216-041-00	METAL CHIP	470	5%	1/10W
R798	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R800	1-216-041-00	METAL CHIP	470	5%	1/10W
R801	1-216-041-00	METAL CHIP	470	5%	1/10W
R802	1-216-041-00	METAL CHIP	470	5%	1/10W
R803	1-216-041-00	METAL CHIP	470	5%	1/10W
R804	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R902	1-216-041-00	METAL CHIP	470	5%	1/10W
R906	1-216-041-00	METAL CHIP	470	5%	1/10W
R911	1-216-041-00	METAL CHIP	470	5%	1/10W
R913	1-216-041-00	METAL CHIP	470	5%	1/10W

Ref. No.	Part No.	Description			Remark
R914	1-216-041-00	METAL CHIP	470	5%	1/10W
R952	1-216-049-11	METAL GLAZE	1K	5%	1/10W
R953	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R954	1-216-073-00	METAL CHIP	10K	5%	1/10W
R955	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R956	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R957	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< MODULATOR >			
RFU901	1-475-242-11	RF UNIT			
		< RELAY >			
⚠RY101	1-755-150-11	RELAY			
		< SWITCH >			
SW951	1-692-991-11	SWITCH, SLIDE (DIAL MODE)			
SW952	1-572-381-21	SWITCH, KEY BOARD (PAGE)			
		< TRANSFORMER >			
⚠T101	1-429-648-11	TRANSFORMER, LINE			
		< VIBRATOR >			
X150	1-567-505-11	OSCILLATOR, CRYSTAL (3.579545MHz)			
X752	1-767-566-21	VIBRATOR, CRYSTAL (9.6MHz)			
**********					
*	A-3622-113-A	HAND MAIN BOARD, COMPLETE			
		**********			
	3-012-368-01	HOLDER (LCD)			
	3-028-552-01	SHEET (COPPER LEAF.RF)			
	3-935-518-01	CUSHION (MICROPHONE)			
	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S			
		< BUZZER >			
BZ401	1-544-603-11	BUZZER			
		< CAPACITOR >			
C301	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C302	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C303	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C305	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C306	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C307	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C308	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C309	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C311	1-163-239-11	CERAMIC CHIP	33PF	5%	50V
C401	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C402	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C403	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C404	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C405	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C407	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C410	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C411	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C412	1-115-565-11	CERAMIC CHIP	2.2uF	10%	10V
C413	1-135-259-11	TANTALUM CHIP	10uF	20%	6.3V
C414	1-163-235-11	CERAMIC CHIP	22PF	5%	50V

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HAND MAIN

Ref. No.	Part No.	Description			Remark
C415	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C416	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C417	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C420	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C421	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C422	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C423	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C424	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C426	1-135-259-11	TANTALUM CHIP	10uF	20%	6.3V
C427	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C501	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C502	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C505	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C506	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C507	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C508	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C509	1-124-779-00	ELECT CHIP	10uF	20%	16V
C510	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C511	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C512	1-164-222-11	CERAMIC CHIP	0.22uF		25V
C513	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C514	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C515	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C516	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C523	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C530	1-126-603-11	ELECT CHIP	4.7uF	20%	35V
C555	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C585	1-163-031-11	CERAMIC CHIP	0.01uF		50V
		< CONNECTOR >			
CN301	1-766-180-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN302	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN401	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
* CN501	1-779-773-11	PIN, CONNECTOR (PC BOARD) 8P			
* CN502	1-779-774-11	PIN, CONNECTOR (PC BOARD) 16P			
CN503	1-568-237-11	CONNECTOR, FPC (1.0MM) (ZIF)14P			
		< DIODE >			
D301	8-719-938-75	DIODE	SB05-05CP		
D302	8-719-938-75	DIODE	SB05-05CP		
D303	8-719-938-75	DIODE	SB05-05CP		
D304	8-719-938-75	DIODE	SB05-05CP		
D305	8-719-914-43	DIODE	DAN202K		
D306	8-719-066-61	DIODE	RD5.6P-T1		
D308	8-719-105-91	DIODE	RD5.6M-B2		
D401	8-719-914-43	DIODE	DAN202K		
D402	8-719-914-43	DIODE	DAN202K		
D403	8-719-914-44	DIODE	DAP202K		
D404	8-719-105-91	DIODE	RD5.6M-B2		
D502	8-719-914-42	DIODE	DA204K		
D503	8-719-914-42	DIODE	DA204K		
D505	8-719-914-42	DIODE	DA204K		
		< IC >			
IC301	8-759-519-46	IC	S-80730AN-DT-S		
IC401	8-759-530-12	IC	10497-15		
IC501	8-759-530-13	IC	M7002-11		
IC502	8-759-487-05	IC	S-24C16AFJ-TB		
		< SHORT >			
JR1	1-216-296-00	SHORT	0		
JR2	1-216-296-00	SHORT	0		
JR3	1-216-296-00	SHORT	0		
JR4	1-216-296-00	SHORT	0		
JR6	1-216-295-00	SHORT	0		
JR7	1-216-295-00	SHORT	0		
JR8	1-216-295-00	SHORT	0		
JR10	1-216-295-00	SHORT	0		
JR15	1-216-296-00	SHORT	0		
JR18	1-216-296-00	SHORT	0		
JR20	1-216-296-00	SHORT	0		
JR21	1-414-481-11	INDUCTOR	68nH		
JR22	1-216-295-00	SHORT	0		
JR23	1-216-295-00	SHORT	0		
		< COIL >			
L501	1-410-198-51	INDUCTOR CHIP	3.3uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD501	1-475-241-11	LCD UNIT			
		< MICROPHONE >			
MIC401	1-542-118-11	MICROPHONE, ELECTRET CONDENSER			
		< TRANSISTOR >			
Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q302	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q303	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q501	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q502	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q503	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q504	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q505	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R301	1-216-093-00	METAL CHIP	68K	5%	1/10W
R302	1-216-085-00	METAL CHIP	33K	5%	1/10W
R303	1-216-097-00	RES, CHIP	100K	5%	1/10W
R304	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R305	1-216-073-00	METAL CHIP	10K	5%	1/10W
R308	1-216-089-00	RES, CHIP	47K	5%	1/10W
R309	1-216-073-00	METAL CHIP	10K	5%	1/10W
R310	1-216-049-11	RES, CHIP	1K	5%	1/10W
R311	1-216-097-00	RES, CHIP	100K	5%	1/10W
R312	1-216-089-00	RES, CHIP	47K	5%	1/10W
R401	1-216-017-00	RES, CHIP	47	5%	1/10W
R402	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R403	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R405	1-216-073-00	METAL CHIP	10K	5%	1/10W
R409	1-216-037-00	METAL CHIP	330	5%	1/10W
R410	1-216-097-00	RES, CHIP	100K	5%	1/10W
R413	1-216-021-00	RES, CHIP	68	5%	1/10W
R414	1-216-021-00	RES, CHIP	68	5%	1/10W
R415	1-216-061-00	METAL CHIP	3.3K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R416	1-216-817-11	METAL CHIP	470	5%	1/16W
R417	1-216-809-11	RES, CHIP	100	5%	1/10W
R501	1-216-121-00	RES, CHIP	1M	5%	1/10W
R502	1-216-025-00	RES, CHIP	100	5%	1/10W
R506	1-216-001-00	METAL CHIP	10	5%	1/10W
R507	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R508	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R509	1-218-756-11	METAL CHIP	150K	0.50%	1/10W
R510	1-216-073-00	METAL CHIP	10K	5%	1/10W
R511	1-216-121-00	RES, CHIP	1M	5%	1/10W
R513	1-216-821-11	METAL CHIP	1K	5%	1/16W
R514	1-216-097-00	RES, CHIP	100K	5%	1/10W
R515	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R517	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R527	1-216-073-00	METAL CHIP	10K	5%	1/10W
R528	1-216-097-00	RES, CHIP	100K	5%	1/10W
R529	1-216-073-00	METAL CHIP	10K	5%	1/10W
R530	1-216-049-11	RES, CHIP	1K	5%	1/10W
R531	1-216-049-11	RES, CHIP	1K	5%	1/10W
R532	1-216-049-11	RES, CHIP	1K	5%	1/10W
R533	1-216-049-11	RES, CHIP	1K	5%	1/10W
R534	1-216-295-00	SHORT	0		
R536	1-216-295-00	SHORT	0		
R537	1-216-295-00	SHORT	0		
R538	1-216-295-00	SHORT	0		
R539	1-216-295-00	SHORT	0		
R542	1-216-296-00	SHORT	0		
R544	1-216-817-11	METAL CHIP	470	5%	1/16W
R545	1-216-817-11	METAL CHIP	470	5%	1/16W
R546	1-216-821-11	METAL CHIP	1K	5%	1/16W
R547	1-216-864-11	METAL CHIP	0	5%	1/16W
R548	1-216-295-00	SHORT	0		
R549	1-216-295-00	SHORT	0		
R550	1-216-295-00	SHORT	0		
R551	1-216-041-00	METAL CHIP	470	5%	1/10W
R552	1-216-041-00	METAL CHIP	470	5%	1/10W
R554	1-216-817-11	METAL CHIP	470	5%	1/16W
R555	1-216-817-11	METAL CHIP	470	5%	1/16W
R556	1-216-817-11	METAL CHIP	470	5%	1/16W
R557	1-216-041-00	METAL CHIP	470	5%	1/10W
R558	1-216-041-00	METAL CHIP	470	5%	1/10W
R560	1-216-041-00	METAL CHIP	470	5%	1/10W
R570	1-216-073-00	METAL CHIP	10K	5%	1/10W
R571	1-216-073-00	METAL CHIP	10K	5%	1/10W
R572	1-216-073-00	METAL CHIP	10K	5%	1/10W
R573	1-216-073-00	METAL CHIP	10K	5%	1/10W
R574	1-216-097-00	RES, CHIP	100K	5%	1/10W
R575	1-216-097-00	RES, CHIP	100K	5%	1/10W
R582	1-216-073-00	METAL CHIP	10K	5%	1/10W
R583	1-216-045-00	METAL CHIP	680	5%	1/10W
R584	1-216-833-11	METAL CHIP	10K	5%	1/16W
R585	1-216-813-11	METAL CHIP	220	5%	1/16W
R586	1-216-073-00	METAL CHIP	10K	5%	1/10W
R587	1-216-298-00	METAL CHIP	2.2	5%	1/10W
R590	1-216-041-00	METAL CHIP	470	5%	1/10W
R591	1-216-041-00	METAL CHIP	470	5%	1/10W
R593	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R594	1-216-827-11	METAL CHIP	3.3K	5%	1/16W

< SWITCH >

S501	1-692-991-11	SWITCH, SLIDE (RING ON/BATT SAVE)
S502	1-570-909-11	SWITCH, TACTIL (REFLOW TYPE) (TALK)

< MODULATOR >

RFU501	1-475-242-21	RF UNIT

< SWITCH >

SW601	1-475-338-11	ENCODER, ROTARY (JOG)

< VIBRATOR >

X501	1-767-566-21	VIBRATOR, CRYSTAL (9.6MHz)

****

*	1-667-284-11	LED BOARD

****

< DIODE >

D951	8-719-059-87	DIODE SLR-342VRTB7 (NEW CALL)

****

MISCELLANEOUS

****

8	1-771-066-21	SWITCH, RUBBER KEY
ANT501	1-501-933-21	ANTENNA
ANT901	1-501-932-21	ANTENNA
SP401	1-504-829-11	SPEAKER (28MM)

****

****

HARDWARE LIST

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#1	7-685-650-79	SCREW +P 3X16 TYPE2 NON-SLIT
#2	7-685-135-19	SCREW +BTP 2.6X10 TYPE2 N-S
#3	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S

****

ACCESSORIES & PACKING MATERIALS

****

⚠	1-475-780-31	ADAPTOR, AC (AC-T123)
	1-528-884-11	BATTERY, NICKEL CADMIUM (BP-T24)
	1-696-453-21	CORD (WITH MODULAR PLUG) (LINE) (22cm)
	1-696-454-11	CORD (WITH MODULAR PLUG) (LINE) (2m15CM)
	3-012-379-21	CASE (WALL HOOK)
	3-862-753-12	MANUAL, INSTRUCTION (ENGLISH, SPANISH) (US)
	3-862-753-21	MANUAL, INSTRUCTION (ENGLISH, FRENCH) (Canadian)
	3-862-754-12	GUIDE, QUICK START (US)
	3-862-754-21	GUIDE, QUICK START (Canadian)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

9-925-955-11

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Personal & Mobile Communication Company

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